I

What is claimed is:

1. A compound of Formula I $R^{2} \qquad R^{3}$ 5_{1}^{2}

5

10

15

20

25

30

wherein Y is selected from S, O, and NR^1 ; wherein R^1 is selected from hydrido and C_1 - C_6 alkyl; wherein X is one or more substituents selected from

a) hydrido, halo, cyano, nitro, hydroxy, acyl, lower alkyl substituted at a substitutable position with a substituent selected from halo, hydroxyl, amino, acylamino, lower alkylamino, lower alkyl(acyl)amino, acyl, aryl optionally substituted with hydroxyl, a heterocyclic group, hydroxyimino and lower alkoxyimino, lower alkenyl optionally substituted at a substitutable position with cyano, amino optionally substituted at a substitutable selected from acyl and lower alkylsulfonyl, sulfo, sulfamoyl optionally substituted with a substituent selected from the group consisting of lower alkyl, halo(lower)alkyl, aryl, hydroxyl, lower alkylamino(lower)alkyl, a heterocyclic

group and (esterified carboxy)lower alkyl, N-containing heterocyclicsulfonyl, a heterocyclic group optionally substituted at a substitutable position with a substituent selected from the group consisting of hydroxyl, oxo, amino and lower alkylamino, provided that when Y is O or NR¹ then X cannot be hydroxyalkyl,

b) $S(0)_n R^5$, wherein R^5 is C_1 - C_6 a kyloptionally substituted at a substitutable position with fluoro, and n is 0, 1 or 2,

	c) $C(R^6)(OR^8)(R^7)$ wherein R^6 and R^7
	independently are selected from CF3, CF2H, CFCl2
	CF ₂ Cl, CCl _F H, CCl ₂ F, CF ₃ CF ₂ and C ₁ -C ₂ alkyl, and
	wherein R^8 is selected from hydrido, C_1 - C_4 alkyl
5	(C1-C3 alkyl)(C(O) and CO2R 9 , wherein R 9 is C1-C4
	alkyl,
	d) $C(0)ZR^{\frac{1}{2}}$, wherein Z is O, N, or S, and R4
	is selected from hydrido, C1-C6 alkyl and aryl,
	and when Z is N then \mathbb{R}^4 is independently taken
10	twice,
	e) $C(R^9)$ (NHR ¹¹ $)$ (R ¹⁰), wherein R^9 and R^{10} are
	independently selected from CF3, CF2H, CFCl2,
	CF2Cl, CClFH and CCl2 $^{ m H}$, and $^{ m R}^{ m 11}$ is selected from
	hydrido and C_1 - C_3 alky 1 , and
15	f) $Si(R^{12})(R^{13})(R^{14})$, wherein R^{12} , R^{13} and
	${ t R}^{14}$ are independently selected from hydrido, C1-
•	C2 alkoxy, C1-C7 optionally substituted at a
	substitutable position with a radical selected
	from halo, C2-C7 alkenyl phenyl and benzyl,
20	provided that the sum of the number of carbon
	atoms in \mathbb{R}^{12} , \mathbb{R}^{13} and \mathbb{R}^{14} must be at least 1 and
	not greater than 9, and further provided that no
	more than 2 of R^{12} , R^{13} and R^{14} are alkoxy; and
	wherein R ² and R ³ are independently selected from
25	g) aryl or heteroaryl, wherein the aryl or
	heteroaryl radical is optionally substituted at a
	substitutable position with a radical selected
	from halo, lower alkyl, lower alkoxy lower
	alkylthio, lower alkylsulfinyl, lower
30	alkylsulfonyl, nitro, amide, amino, lower
	alkylamino, sulfamyl and lower $igwedge$
	alkylsulfonylamino, \setminus
	h) para-phenylene-Q wherein Q is $C_1 + C_2$ alkyl
	or ${ m NR}^{15}{ m R}^{16}$, wherein ${ m R}^{15}$ and ${ m R}^{16}$ are independently
35	C_1-C_2 alkyl,

15

20

25

30

i) p-Q1(m-Q²)phenylene, wherein Q¹ is selected from hydrido, fluoro, chloro, bromo, nitro, C1-C2 alkyl, C1-C2 alkoxy, di(C1-C2 alkyl)amino and $S(0)_nR^{17}$, wherein R^{17} is CH3 or C2H5; and wherein Q² is selected from hydrido, fluoro and chloro, and n is 0, 1 or 2; provided that both Q¹ and Q² cannot both be hydrido at the same time, and

j) phenylene-W wherein W is alkylamino; 10 provided that

R² and R³ cannot both be phenyl; further provided that when Y is S, then R² and R³ cannot both be 3,5-dihalophenyl; further provided that if X is hydrido, then R² and R³ are not both p-methoxyphenyl, p-chlorophenyl, p-methylphenyl, p-bromophenyl, or 2-naphthyl; further provided that if X is hydrido, nitro, bromo, O2-alkyl, benzoyl or CO2H, then R² and R³ are not both p-methoxyphenyl; and further provided that when Y is NR¹ and R² and R³ are independently aryl optionally substituted at a substitutable position with C1-C4 alkyl, halo, nitro or C1-C4 alkoxy, then X cannot be hydrido, -CO2H or -CO2-alkyl of from one to four carbons; or a pharmaceutically-acceptable salt thereof.

- 2. A compound of Claim 1 wherein R^2 and R^3 are independently pyridyl or para-phenylene-Q, wherein Q is selected from C1-C2 alkyl, or $NR^{15}R^{16}$; wherein R^{15} and R^{16} are independently C1-C2 alkyl; or a pharmaceutically-acceptable salt thereof.
- 3. A compound of Claim 1 wherein X is $S(0)_n R^5$, wherein R^5 is G_1-G_6 alkyl optionally substituted at a substitutable position with fluoro,

and n is 0, 1 or 2; or a pharmaceutically-acceptable salt thereof.

- 4. A compound of Claim 1 wherein R^2 and R^3 are independently pyridyl or $p-Q^1$ ($m-Q^2$) phenylene, wherein Q^1 is selected from hydrido, fluoro, chloro, bromo, NO2, C_1-C_2 alkyl, C_1-C_2 alkoxy, di(C_1-C_2 alkyl) amino and $S(O)_nR^{17}$, wherein R^{17} is CH3 or C_2H_5 ; and wherein Q^2 is selected from hydrido, fluoro and chloro, and n is 0, 1 or 2; provided that both Q^1 and Q^2 cannot both be hydrido at the same time; or a pharmaceutically-acceptable salt thereof.
- 5. A compound of Claim 1 wherein X is

 C(R⁶)(OR⁸)(R⁷) wherein R⁶ and R⁷ independently are selected from CF₃, CF₂H, OFC₁₂, CF₂C₁, CClFH, CCl₂F, CF₃CF₂ and C₁-C₂ alkyl; wherein R⁸ is selected from hydrido, C₁-C₄ alkyl, (C₁-C₃ alkyl)C(O) and CO₂R⁹; and wherein R⁹ is C₁-C₄ alkyl, or a pharmaceutically
 acceptable salt thereof.
- 6. A compound of Claim 1 wherein X is $C(R^9)(NHR^{11})(R^{10})$, wherein R^9 and R^{10} are independently selected from CF3, CF2H, CFCl2, CF2Cl, CClFH and CCl2H, and R^{11} is selected from hydrido and C1-C3 alkyl; or a pharmaceutically acceptable salt thereof.
- 7. A compound of Claim 1 wherein R² and R³
 30 are independently selected from aryl and heteroaryl, wherein the aryl or heteroaryl radical is optionally substituted at a substitutable position with halo, lower alkyl, lower alkoxy, lower alkylthio, lower alkylsulfinyl, lower alkylsulfonyl, nitro, amino, lower alkylamino, sulfamyl and lower

alkylsulfonylamino; or a pharmaceutically-acceptable salt thereof.

- 8. A compound of Claim 1 wherein X is

 5 Si(R¹²)(R¹³)(R¹⁴), wherein R¹², R¹³ and R¹⁴ are independently selected from hydrido, C₁-C₂ alkoxy, C₁-C₇ optionally substituted at a substitutable position with a radical selected from halo, C₂-C₇ alkenyl, phenyl and benzyl, provided that the sum of the number of carbon atoms in R¹², R¹³ and R¹⁴ must be at least 1 and not greater than 9, and further provided that no more than 2 of R¹², R¹³ and R¹⁴ are alkoxy; or a pharmaceutically-acceptable salt thereof.
- 15 9. Compound of Claim 1 wherein X is one or two substituents selected from hydrido, halo, cyano, nitro, hydroxyl, acyl, lower lkyl substituted at a substitutable position with X substituent selected from halo, hydroxyl, amino acylamino, lower alkylamino, lower alkyl(acyl)amino, acyl, aryl 20 optionally substituted with hydroxyl, a heterocyclic group, hydroxyimino and lower alkoxyimino, lower alkenyl optionally substituted at a \substitutable position with cyano, amino optionally\substituted at a substitutable position with a radical \Re elected from 25 acyl and lower alkylsulfonyl, sulfo, sulfamoyl optionally substituted with a substituent\selected from the group consisting of lower alkyl, halo(lower)alkyl, aryl, hydroxyl, lower alkylamino(lower)alkyl, a heterocyclic group and 30 (esterified carboxy)lower alkyl, N-containing heterocyclicsulfonyl, a heterocyclic group opti δ_{nally} substituted at a substitutable position with a substituent selected from the group consisting of hydroxyl, oxo, amino and lower alkylamino; and where in 35 $\ensuremath{\text{R}^2}$ and $\ensuremath{\text{R}^3}$ are independently selected from aryl and

heteroaryl, wherein the aryl or heteroaryl radical is optionally substituted at a substitutable position with a radical selected from halo, lower alkyl, lower alkoxy lower alkylthio, lower alkylsulfinyl, lower alkylsulfonyl, nitro, amino, amide, lower alkylamino, sulfamyl and lower alkylsulfonylamino; or a pharmaceutically-acceptable salt thereof.

10\ Compound of Claim 9 wherein Y is S or 10 O; wherein X is one or two substituents selected from hydrido, halo, dyano, nitro, hydroxyl, carboxy, lower alkoxycarbonyl, lower alkyl substituted at a substitutable position with a substituent selected from halo, hydroxyl, amino, acylamino, lower 15 alkylamino, lower alkxl(acyl)amino, lower alkoxycarbonyl, carboxy a heterocyclic group, hydroxyimino and lower akkoxyimino, lower alkenyl optionally substituted at a substitutable position with cyano, amino optionally substituted at a substitutable position $\chi th a$ radical selected from 20 acyl and lower alkylsulfonyl, sulfo, sulfamoyl optionally substituted with a substituent selected from the group consisting of lower alkyl, $halo(lower)alkyl, aryl, hydroxyl \lambda lower$ alkylamino(lower)alkyl, a heterocyclic group and 25 (alkoxycarbonyl)lower alkyl, N-containing heterocyclicsulfonyl, a heterocyclic group optionally substituted at a substitutable position with a substituent selected from the group comsisting of hydroxyl, oxo, amino and lower alkylamino; and wherein 30 ${\bf R}^2$ and ${\bf R}^3$ are independently selected from aryl and heteroaryl, wherein the aryl or heteroaryl radical is optionally substituted at a substitutable position with a radical selected from halo, lower alkxl, lower alkoxy, lower alkylthio, lower alkylsulfinyl, \lower 35 alkylsulfonyl, nitro, amino, amide, lower alkylamino,

sulfamyl and lower alkylsulfonylamino; or a pharmaceutically-acceptable salt thereof.

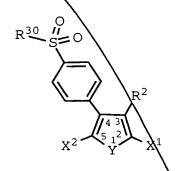
11. A compound of Claim 10 wherein X is one or two substituents selected from hydrido, fluoro, chloro, bromo and iodo; or a pharmaceutically-acceptable salt thereof.

12. A compound of Formula II

10

15

20



II

wherein Y is selected from O, S and NR^1 ; wherein R^1 is selected from bydrido and lower alkyl;

wherein \mathbf{X}^1 and \mathbf{X}^2 are independently selected from hydrido, halo, lower alkoxycanbonyl and carboxyl;

wherein \mathbb{R}^2 is selected from anyl and heteroaryl; wherein \mathbb{R}^2 is optionally substituted at a substitutable position with a radical selected from halo, lower alkoxy and lower alkyl; and

wherein R^{30} is selected from amind and lower alkyl;

or a pharmaceutically-acceptable salt thereof.

25

30

S;

13. Compound of Claim 12 wherein Y is O or

wherein R^2 is selected from phenyl, naphthyl, biphenyl, and pyridyl; wherein R^2 is optionally substituted at a substitutable position with a radical selected from halo, lower alkoxy and lower alkyl; and

wherein R^{30} is selected from amino and C_1 - C_3 alkyl; or \a pharmaceutically-acceptable salt thereof. 5 14. Compound of Claim 13 wherein \mathbf{X}^{1} and \mathbf{X}^{2} are independently selected from hydrido, fluoro, chloro, bromo, iodo, methoxycarbonyl, ethoxycarbonyl and carboxyl wherein R^2 is phenyl or pyridyl; wherein R^2 is 10 optionally substituted at a substitutable position with a radical selected from fluoro, chloro, bromo, iodo, methoxy, ethoxy, methyl and ethyl; and wherein R^{30} is amino or methyl; or a pharmaceutically-acceptable salt thereof. 15 15. Compound of Claim 14 selected from compounds and their pharmaceutically-acceptable salts, of the group consisting 4-(4-methylsulfonylpheny1)20 thiophene; 4-(4-methylsulfonylphenyl)-3-(4-fluorophenyl)-2,5dibromothiophene; 4-(4-methylsulfonylphenyl) -3-(4-fluorophenyl)-2bromothiophene; 25 ethyl[3-(4-methylsulfonylphenyl) $\frac{1}{4}$ -(4-fluorophenyl) thien-2-yl]carboxylate; 2-ethoxycarbonyl-4-(4-fluorophenyl) -3-(4-fluorophenyl) -3-(4-flmethylsulfonylphenyl)thienyl-5-carboxylic acid; 4-(4-fluorophenyl)-3-(4-methylsulfonylphenyl) thienyl-2,5-dicarboxylic acid; 30 4-(4-methylsulfonylphenyl)-3-(4-methoxyphenyl) thiophene; 4-(4-methylsulfonylphenyl)-3-(4-methoxyphenyl)-2-bromothiophene; 3-(4-methylsulfonylphenyl)-4-phenyl-thiophene; 35 3-(4-methylsulfonylphenyl)-4-(4-methylphenyl)

10

30

35

thiophene;

3-(4-methylsulfonylphenyl)-4-(2-methyl-4fluorophenyl)thiophene;

2-fluoro-5-[3-(4-methylsulfonylphenyl)
thien-4-yl]pyridine;

4-[4-(4-fluorophenyl)thien-3-yl]benzenesulfonamide;

4-[3-(4-fluorophenyl)-2,5-dibromo-thien-4yl]benzenesulfonamide;

4-[3-(4-fluorophenyl)-2-bromo-thien-4-yl]

benzenesulfonamide; and 3-(4-fluorophenyl)-4-(methylsulfonylphenyl)furan.

- 16. A pharmaceutical composition comprising a therapeutically-effective amount of an
 15 antiinflammatory compound, said compound selected from a compound of Claim 1; or a pharmaceutically-acceptable salt thereof.
- 17. A pharmaceutical composition comprising
 20 a therapeutically-effective amount of an
 antiinflammatory compound, said compound selected from
 a compound of Claim 12; or a pharmaceuticallyacceptable salt thereof.
- 18. A pharmaceutical composition comprising a therapeutically-effective amount of an antiinflammatory compound, said compound selected from a compound of Claim 13; or a pharmaceutically-acceptable salt thereof.
 - 19. A pharmaceutical composition comprising a therapeutically-effective amount of an antiinflammatory compound; said compound selected from a compound of Claim 14; or a pharmaceutically-acceptable salt thereof.

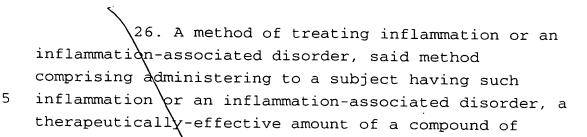
30

35

- 20. A pharmaceutical composition comprising a therapeutically-effective amount of an antiinflammatory compound, said compound selected from a compound of Claim 15; or a pharmaceutically-acceptable salt thereof.
- 21. The composition of Claim 20 wherein the compound is 4-[4-(4-fluorophenyl)thien-3-yl]benzenesulfonamide; or a pharmaceutically-acceptable salt thereof.
- 22. The composition of Claim 20 wherein the compound is 4-[3-(4-fluorophenyl)-2-bromo-thien-4-yl]benzenesulfonamide; or a pharmaceutically-acceptable salt thereof.
- 23. A method of treating inflammation or an inflammation-associated disorder, said method comprising administering to a subject having such inflammation or an inflammation associated disorder, a therapeutically-effective amount of a compound of Claim 1.
- 24. A method of treating inflammation or an inflammation-associated disorder, said method comprising administering to a subject having such inflammation or an inflammation-associated disorder, a therapeutically-effective amount of a compound of Claim 12.
 - 25. A method of treating inflammation or an inflammation-associated disorder, said method comprising administering to a subject having such inflammation or an inflammation-associated disorder, a therapeutically-effective amount of a compound of Claim 13.

25

Claim 14.



- 27. A method of treating inflammation or an inflammation-associated disorder, said method comprising administering to a subject having such inflammation or an inflammation-associated disorder, a therapeutically-effective amount of a compound of Claim 15.
 - 28. The method of Claim 28 wherein the compound is 4-[4-(4-fluorophenyl)thien-3-yl]benzenesulfonamide; or a pharmaceutically-acceptable salt thereof.
 - 29. The method of claim 28 wherein the compound is 4-[3-(4-fluorophenyl)-2-bromo-thien-4-yl]benzenesulfonamide; or a pharmaceutically-acceptable salt thereof.
 - 30. The method of Claim $2\frac{1}{3}$ for use in treatment of inflammation.
- 31. The method of Claim 23 for use in treatment of an inflammation-associated disorder.
 - 32. The method of Claim 31 wherein the inflammation-associated disorder is arthritis.
- 35 33. The method of Claim 31 wherein the inflammation-associated disorder is pain.
 - 34. The method of Claim 31 wherein the inflammation-associated disorder is fever.

ada 32)